

IN THE CLAIMS:

Please cancel Claims 2, 4, 16 and 18 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 1, 5, 15, 19, 30, 32-34, and add new Claims 35-38, as follows:

1. (Currently Amended) A print system in which a printing apparatus prints by using print data which is sent by a printer driver which is made operative by an information processing apparatus, wherein said printer driver comprises:

a structure information generation unit adapted to divide each page of print data to be sent into a plurality of data blocks and to generate structure information of each data block, the structure information including a color attribute of the data block;

an information adding unit adapted to add the ~~means for adding~~ structure information generated by said structure information generation unit ~~of said print data~~ to each data block of the ~~said~~ print data which is sent; and

an information sending unit adapted to send the print data including the ~~means for sending said~~ added structure information to said printing apparatus,

wherein said printing apparatus comprises:

a determination unit adapted to determine a number of nozzles of a print head to be used for each data block of the print data on the basis of the received structure information; and

a print process unit adapted to execute ~~means for executing~~ a printing process of the data block of the said print data by using the number of nozzles determined by said determination unit ~~on the basis of said received structure information,~~

wherein if data of a next page exists, during the print of a present page, said printer driver notifies said printing apparatus of a print mode and a data structure of the next page as said structure information by said information sending unit ~~means~~, and

wherein if it is possible to confirm that a printing operation which is being performed at present can be continuously executed from said notified contents, said printing apparatus subsequently executes a process of the next page.

2. (Cancelled)

3. (Previously Presented) A system according to claim 1, wherein said printer driver analyzes said print data before said print data is sent to said printing apparatus, and said analyzed information is set as said structure information.

4. (Cancelled)

5. (Currently Amended) A system according to claim 1 ~~4~~, wherein when said structure information is not sent, said printing apparatus analyzes said print data and prints.

6. (Original) A system according to claim 1, wherein said structure information includes at least either information showing whether the print data which is subsequently printed is color data or monochrome data or information showing whether said color data and said monochrome data are adjacent to each other or not, and said printing apparatus prints on the basis of said structure information.

7. (Original) A system according to claim 1, wherein said structure information includes at least one of information showing on what number line from a present position the print data which is subsequently printed is generated, information showing from what number line color data starts, and information showing from what number line monochrome data starts, and said printing apparatus prints on the basis of said structure information.

8. (Original) A system according to claim 1, wherein said structure information is information regarding right and left edges of the print data which is subsequently printed, and said printing apparatus prints on the basis of said structure information.

9. (Original) A system according to claim 1, wherein said printer driver can set a designated area of said structure information which is added to said print data on an arbitrary unit basis.

10. (Original) A system according to claim 1, wherein said information sending means sends said structure information to said printing apparatus prior to sending said print data, thereby allowing said printing apparatus to recognize a structure of the print data which is subsequently sent.

11. (Previously Presented) A system according to claim 10, wherein if the data of the next page exists during the print of the present page, said printer driver notifies said printing apparatus of such a fact by said information sending means.

Claims 12 and 13 (Cancelled).

14. (Original) A system according to claim 11, wherein if it is possible to confirm that it is difficult to continue the print and an error will occur from said notified contents, said printing apparatus causes an error prior to printing said page.

15. (Currently Amended) A printing method by which a printing apparatus prints by using print data which is sent by a printer driver which is made operative by an information processing apparatus, comprising the steps of:

dividing each page of print data to be sent into a plurality of data blocks and generating structure information of each data block, the structure information including a color attribute of the data block;

adding the generated structure information ~~of said print data~~ to each data block of the ~~said~~ print data which is sent by said printer driver;

sending the print data including the said added structure information to said printing apparatus; and

determining a number of nozzles of a print head to be used for each data block of the print data on the basis of the structure information received by the printing apparatus; and

executing a printing process of the data block of the said print data by using the determined number of nozzles ~~said printing apparatus on the basis of said received structure information,~~

wherein if data of a next page exists, during the print of a present page, said printer driver notifies said printing apparatus of a print mode and a data structure of the next page as said structure information in said sending step, and

wherein if it is possible to confirm that a printing operation which is being performed at present can be continuously executed from said notified contents, the printer apparatus executes a process of the next page.

16. (Cancelled)

17. (Previously Presented) A method according to claim 15, wherein said printer driver analyzes said print data before said print data is sent to said printing apparatus, and said analyzed information is set as said structure information.

18. (Cancelled)

19. (Currently Amended) A method according to claim 15 ~~18~~, wherein when said structure information is not sent, said printing apparatus analyzes said print data and prints.

20. (Original) A method according to claim 15, wherein said structure information includes at least either information showing whether the print data which is subsequently printed is color data or monochrome data or information showing whether said color data and said monochrome data are adjacent to each other or not, and said printing apparatus prints on the basis of said structure information.

21. (Original) A method according to claim 15, wherein said structure information includes at least one of information showing on what number line from a present position the print data which is subsequently printed is generated, information showing from what number line color data starts, and information showing from what number line monochrome data starts, and said printing apparatus prints on the basis of said structure information.

22. (Original) A method according to claim 15, wherein said structure information is information regarding right and left edges of the print data which is subsequently printed, and said printing apparatus prints on the basis of said structure information.

23. (Original) A method according to claim 15, wherein said printer driver can set a designated area of said structure information which is added to said print data on an arbitrary unit basis.

24. (Original) A method according to claim 15, wherein in said step of sending said structure information, said structure information is sent to said printing apparatus prior to sending said print data, thereby allowing said printing apparatus to recognize a structure of the print data which is subsequently sent.

25. (Previously Presented) A method according to claim 24, wherein if data of a next page exists during the print of a present page, said printer driver notifies said printing apparatus of such a fact in said information sending step.

Claims 26 and 27 (Cancelled).

28. (Original) A method according to claim 25, wherein if it is possible to confirm that it is difficult to continue the print and an error will occur from said notified contents, said printing apparatus causes an error prior to printing said page.

Claims 29 (Cancelled).

30. (Currently Amended) A printing apparatus for printing by using print data which is sent by a printer driver which is made operative by an information processing apparatus, comprising:

an information receiving unit adapted to receive ~~means for receiving~~ structure information added to each data block of the print data which is sent by said printer driver, the structure information including a color attribute of the data block divided from the print data; and

a determination unit adapted to determine a number of nozzles of a print head to be used for each data block of the print data on the basis of the received structure information; and

a print processing unit adapted to perform ~~means for performing~~ a printing process of the data block of the ~~said~~ print data by using the number of nozzles determined by said determination unit ~~on the basis of said received structure information,~~

wherein if it is possible to confirm that a printing operation which is being performed at present can be continuously executed from said structure information of a next page, said print processing unit ~~means~~ subsequently executes a process of the next page.

Claim 31 (Cancelled).

32. (Currently Amended) A printing method for a printing apparatus using print data which is sent by a printer driver which is made operative by an information processing apparatus, comprising the steps of:



receiving structure information added to each data block of the print data which is sent by said printer driver, the structure information including a color attribute of the data block divided from the print data; and

determining a number of nozzles of a print head to be used for each data block of the print data on the basis of the received structure information; and

performing a printing process of the data block of the said print data by using the determined number of nozzles ~~on the basis of said received structure information,~~

wherein if it is possible to confirm that a printing operation which is being performed at present can be continuously executed from said structure information of a next page, a process of the next page is subsequently executed.

33. (Currently Amended) A print system in which a printing apparatus prints by using print data which is sent by a printer driver which is made operative by an information processing apparatus,

wherein said printer driver divides each page of print data to be sent into a plurality of data blocks to generate structure information of each data block, the structure information including a color attribute of the data block, adds the generated structure information to each data block of the ~~of said print data to said print data~~ which is sent, and sends the print data including the said added structure information to said printing apparatus,

wherein said printing apparatus determines a number of nozzles of a print head to be used for each data block of the print data on the basis of the received structure

information, executes a printing process of the data block of the said print data by using the determined number of nozzles ~~on the basis of said received structure information~~,

wherein if a data of next page exists, during the print of a present page, said printer driver notifies said printing apparatus of a print mode and a data structure of the next page as said structure information, and

wherein if it is possible to confirm that a printing operation which is being performed at present can be continuously executed from said notified contents, said printing apparatus subsequently executes a process of the next page.

34. (Currently Amended) A printing apparatus for printing by using print data which is sent by a printer driver which is made operative by an information processing apparatus,

wherein said printing apparatus receives structure information added to each data block of the print data which is sent by said printer driver, the structure information including a color attribute of the data block divided from the print data, determines a number of nozzles of a print head to be used for each data block of the print data on the basis of the received structure information, and performs a printing process of the data block of the said print data by using the determined number of nozzles ~~on the basis of said received structure information~~, and

wherein if it is possible to confirm that a printing operation which is being performed at present can be continuously executed from said structure information of a next page, said printing apparatus subsequently executes a process of the next page.

35. (New) A print system in which a printing apparatus prints by using print data which is sent by a printer driver which is made operative by an information processing apparatus, wherein said printer driver comprises:

a structure information generation unit adapted to divide each page of print data to be sent into a plurality of data blocks and to generate structure information of each data block, the structure information including a color attribute of the data block;

an information adding unit adapted to add the structure information generated by said structure information generation unit to each data block of the print data which is sent; and

an information sending unit adapted to send the print data including the added structure information to the printing apparatus,

wherein said printing apparatus comprises:

a determination unit adapted to determine a number of nozzles of a print head to be used for each data block of the print data on the basis of the received structure information; and

a print process unit adapted to execute a printing process of the data block of the print data by using the number of the nozzles determined by said determination unit.

36. (New) A printing apparatus for printing by using print data which is sent by a printer driver which is made operative by an information processing apparatus, comprising:

an information receiving unit adapted to receive structure information added to each data block of the print data which is sent by said printer driver, the structure information including a color attribute of the data block divided from the print data;

a determination unit adapted to determine a number of nozzles of a print head to be used for each data block of the print data on the basis of the received structure information; and

a print processing unit adapted to perform a printing process of the data block of the print data by using the number of the nozzles determined by said determination unit.

37. (New) A print method by which a printing apparatus prints by using print data which is sent by a printer driver which is made operative by an information processing apparatus, comprising the steps of:

dividing each page of print data to be sent into a plurality of data blocks and generating structure information of each data block, the structure information including a color attribute of the data block;

adding the generated structure information to each data block of the print data which is sent;

sending the print data including the added structure information to the printing apparatus;

determining a number of nozzles of a print head to be used for each data block of the print data on the basis of the structure information received by the printing apparatus; and

executing a printing process of the data block of the print data by using the determined number of nozzles.

38. (New) A printing method for a printing apparatus using print data which is sent by a printer driver which is made operative by an information processing apparatus, comprising the steps of:

receiving structure information added to each data block of the print data which is sent by said printer driver, the structure information including a color attribute of the data block divided from the print data;

determining a number of nozzles of a print head to be used for each data block of the print data on the basis of the received structure information; and

performing a print processing of the data block of the print data by using the determined number of nozzles.